# The Statistical Mechanics of Scalar Dark Matter

Tuesday 3 September 2024 09:00 (40 minutes)

Scalar dark matter is all the rage these days in particle cosmology. In this talk, I will describe efforts to understand scalar dark matter systems that may display Bose-Einstein condensate-like behavior. Is it an analogy? How far does it go? I show that this BEC-like state has implications for astrophysical observations, and I will discuss challenges associated with trying to understand out of equilibrium dynamics in these systems.

#### References

### Short bio (50 words) or link to website

http://chanda.science

## Relevant publications (optional)

#### Career stage

Professor

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Track Classification: FINESS